

REMARKS

Claims 1, 6, and 9-12 have been amended. Claim 1 has been amended to essentially include the features of original claim 2. Claim 6 has been amended to reflect the amendments made to claim 1. Claims 9-12 have each been amended to essentially include the features of original claim 2. Claims 2 and 3 have been canceled without disclaimer of the subject matter contained therein. Claims 13-19 have been added. Independent claim 13 essentially includes all of the features of original claim 6. Dependent claims 14-19 include features of many of the originally filed dependent claims. Support for the new claims and amendments to the original claims may be found throughout the specification. No new matter has been added.

In the Office Action, claims 1, 3, 4, and 9-12 were rejected under 35 U.S.C. § 102(b) as being anticipated by Sakai et al. (U.S. Patent No. 4,737,824). Applicant respectfully traverses this rejection.

Independent claim 1 recites a lithographic apparatus that includes, *inter alia*, “a fluid supply structure in communication with said compartment, said fluid supply structure being constructed and arranged to supply a fluid to said compartment, wherein said fluid supply structure includes a flow velocity meter arranged to measure a change in flow velocity of said fluid as a function of time, in order to detect whether or not said object is correctly clamped on said support structure, said meter being connected to a control unit arranged to receive a value representative of said flow velocity of said fluid and arranged to determine a change in said flow velocity of said fluid as a function of time and to compare said change with a predetermined value of said change.” Sakai et al. does not disclose or suggest all of the features of claim 1.

Sakai et al. discloses a surface shape controlling device that includes a pressure sensor (5) that detects the pressure in the closed space defined by a pocket (2b) and a wafer (1). *See* Sakai et al. at col. 3, lns. 35-36. The pressure sensor (5) of Sakai et al. is part of a feedback system for maintaining the pocket (2b) at constant pressure once the exposure operation begins. *See* Sakai et al. at col. 4, lns. 33-38. Sakai et al. does not disclose or suggest a flow velocity meter arranged to measure a change in flow velocity of a fluid as a function of time, in order to detect whether or not an object is correctly clamped on a support structure, as recited by claim 1.

Accordingly, Applicant respectfully submits that claim 1 and the claims that depend from claim 1 are patentable over Sakai et al., and respectfully requests that the rejection to claims 1, 3, and 4 be withdrawn.

Independent claim 9 recites a method to detect correct clamping of an object on a support structure. As recited by claim 9, the method includes, *inter alia*, “measuring a change in flow velocity of the fluid as a function of time; and comparing said change with a predetermined value of said change.” Sakai et al. is discussed above. Sakai et al. does not disclose or suggest – at least - measuring a change in flow velocity of the fluid as a function of time.

Accordingly, Applicant respectfully submits that claim 9 is patentable over Sakai et al., and respectfully requests that the rejection to claim 9 be withdrawn.

Independent claim 10 recites a computer system to detect correct clamping of an object on a support structure that includes, *inter alia*, “means for measuring a change in flow velocity of the fluid as a function of time; and means for comparing said change with a predetermined value of said change.” Sakai et al. is discussed above. Sakai et al. does not disclose or suggest – at least - means for measuring a change in flow velocity of the fluid as a function of time.

Accordingly, Applicant respectfully submits that claim 10 is patentable over Sakai et al., and respectfully requests that the rejection to claim 10 be withdrawn.

Independent claim 11 recites a computer-readable medium encoded with a computer program to detect correct clamping of an object on a support structure. As recited by claim 11, the computer program includes, *inter alia*, “measuring a change in flow velocity of the fluid as a function of time; and comparing said change with a predetermined value of said change.” Sakai et al. is discussed above. Sakai et al. does not disclose or suggest – at least - measuring a change in flow velocity of the fluid as a function of time.

Accordingly, Applicant respectfully submits that claim 11 is patentable over Sakai et al., and respectfully requests that the rejection to claim 11 be withdrawn.

Independent claim 12 recites a support structure assembly for use in a lithographic apparatus that includes, *inter alia*, “a fluid supply structure in communication with said compartment, said fluid supply structure being constructed and arranged to supply a fluid to said compartment, wherein said fluid supply structure includes a flow velocity meter arranged to measure a change in flow velocity of said fluid as a function of time, in order to detect whether or not the object is correctly clamped on said support structure, said meter

being connected to a control unit arranged to receive a value representative of said flow velocity of said fluid and arranged to determine a change in said flow velocity of said fluid as a function of time and to compare said change with a predetermined value of said change.” Sakai et al. is discussed above. Sakai et al. does not disclose or suggest a flow velocity meter arranged to measure a change in flow velocity of a fluid as a function of time, in order to detect whether or not an object is correctly clamped on a support structure, as recited by claim 12.

Accordingly, Applicant respectfully submits that claim 12 is patentable over Sakai et al., and respectfully requests that the rejection to claim 12 be withdrawn.

In the Office Action, claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakai et al. Applicant respectfully traverses this rejection.

Claim 5 depends from claim 1 and adds the feature of the fluid comprising argon. As discussed above, claim 1 and the claims that depend from claim 1 – including claim 5 - are patentable over Sakai et al.

Accordingly, Applicant respectfully requests that the rejection to claim 5 be withdrawn.

In the Office Action, claims 2, and 6-8 were objected to as being dependent upon a rejected base claim. Applicant acknowledge with appreciation that claims 2 and 6-8 would be allowable if rewritten in independent form. As discussed above, claim 1 has been amended to essentially include the features of original claim 2, and new independent claim 13 is essentially original claim 6 rewritten in independent form. As such, Applicants respectfully submit that claim 13 and the claims that depend from claim 13 are allowable.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited. If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

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Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'Emily T. Bell', is written over the printed name.

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